

ABSTRACT OF THE DISCLOSURE

A method of simulating and optimizing qualification testing of lubricating oil products, the method including: passing a plurality of lubricating oil product characteristics to a simulator engine, where the simulator engine includes a plurality of simulated qualification tests and processing the lubricating oil product characteristics in one or more of the simulated qualification tests, where the output of each simulated qualification test includes a probability of passing indicator for indicating the probability that a lubricating oil product have the inputted characteristics would pass an actual qualification test; passing an input of the plurality of lubricating oil product characteristics, the probability of passing indicator from each simulated qualification test, and a proposed test sequence of a plurality of qualification tests to a strategy simulator engine and processing the input to determine a probability of passing indicator, cost and time duration of the proposed test sequence.